



UNITED STATES PATENT AND TRADEMARK OFFICE

20h

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/988,116

11/16/2001

Ihab Elzind

PNTRD-00610

8080

7590

06/30/2005

Derek J. Westberg
Law Offices of Derek J. Westberg
Two North Second Street, Suite 1390
San Jose, CA 95113

EXAMINER

CHO, HONG SOL

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/988,116		ELZIND, IHAB	
	Examiner		Art Unit	
	Hong Cho		2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because of the following informalities:

On page 1, line 2, "uses A packet based protocol" should read - - uses a packet based protocol --.

On page 1, line 9, "know t route" should read - - know the route --.

On page 1, line 12, "based on a fields" should read - - based on fields --.

Claim Objections

2. Claims 1 and 2 are objected to because of the following informalities:

Re claim 1, on page 1, line 1, "there is modems" should read - - there are modems --.

On page 1, line 2, "Exchange packets" should read - - exchange packets --.

On page 1, line 4, "Where the packet" should read - - where the packet --.

On page 1, line 6, "Where the packet" should read - - where the packet --.

On page 1, line 6, "abeam number" should read - - a beam number --.

On page 1, line 8, "necessarley the same ," should read - - necessarily the same, --

On page 1, line 9, "They" should read - - they --.

Art Unit: 2662

Re claim 2, on page 1, line 2, "Antennas ," should read - - antennas, --

On page 1, line 3, "Through" should read - - through --.

On page 1, line 3, "connect" should read - - connected --.

On page 1, line 4, "Finds" should read - - finds --.

On page 1, line 5, "Direction" should read - - direction --.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 2 is rejected under 35 U.S.C. 102(e) as being anticipated by Krile (U.S. 6229486).

Re claim 2, Krile discloses a subscriber unit communicating with a base station by selecting the antenna element of its associated smart antenna that directs its antenna pattern or beam towards the base station providing the optimal signal (*the modem will search for a base station reception by scanning through the multibeam or the different antennas connected to it until it finds a base station further eliminating human intervention to adjust the direction of antennas*, column 2, lines 30-34; column 4, lines 49-51; column 5, lines 21-23).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hartman (USPUB 20020075830) in view of Chennakeshu et al (U.S 5822310), hereinafter referred to as Chennakeshu.

Re claim 1, Hartman discloses subscriber equipment with a wireless modem (WM, *modem*, figure 1, element 110) communicating with a Wireless Access Termination System (WATS, *base station*, figure 1, element 106) (*packet protocol based wireless network where there are modems and a base station exchanging packets in a known packet format*). Hartman fails to disclose exchanging packets with a field identifying an antenna number where the packet is received on and an antenna number where the packet is transmitted on at the receiving modem or a beam number in a multibeam antenna. Chennakeshu discloses a system where a beam identity (ID), which identifies the beam being used, is transmitted in a Time Division Multiple Access (TDMA) frame

(column10, lines 17-28; figure 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hartman to implement short message service of Chennakeshu in transmitting beam ID or antenna number in a frame format to reduce system interference and improve system capacity by utilizing both the directional and space diversity of nature of the smart antenna.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - US Patent (6295283) to Falk
 - US Patent (6414945) to Chennakeshu et al
 - US Patent (5563606) to Wang
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087. The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3088.

Art Unit: 2662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hc

Hong Cho
Patent Examiner
6/23/2005



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600